STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION

SURREBUTTAL TESTIMONY

OF

DAVID F. RUSSELL

FILED ON BEHALF OF THE BRISTOL COUNTY WATER AUTHORITY

IN THE MATTER OF

PROVIDENCE WATER SUPPLY BOARD

DOCKET 4406

OCTOBER 25, 2013

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is David F. Russell, and my business address is 15 Titcomb Street, Suite 300, Newburyport, Massachusetts 01950.

Q. Are you the same David Russell who submitted pre-filed direct testimony in this docket?

A. Yes, I am.

Q. What is the purpose of this testimony?

A. I would like to address the Providence Water Supply Board's rebuttal testimony, and the responses of its witnesses to the issues I raised in my direct testimony.

Q. How have you organized your surrebuttal testimony?

A. I will address the issues Providence raised in its rebuttal testimony in the same order as in my direct testimony.

II. DOCKET OVERVIEW

Q. Ms. Bondarevskis addressed the overview section of your direct testimony. Can you please comment on her testimony?

A. While Ms. Bondarevskis did not file direct testimony in this Docket, she did file rebuttal testimony and pointed out a couple of inaccuracies in the overview section of my direct testimony, which I will address.

First, I was off by several months in my estimate of the duration of time between Providence's last rate increase and its proposal in this case. However, I stand by my statement that the compound increase between the last increase resulting from a full rate case (Docket 3832) and the increase to wholesale customers initially proposed in this case would be about 51%.

However, there was also an increase from an abbreviated case (Docket 4061) in between this case and the last full rate case which resulted in an Across-The-Board (A-T-B) increase of 9.91%. Therefore, when this abbreviated rate case increase is factored into the analysis, the compounded increase in rates to wholesale customers since the last full rate case increase and the initial increase proposed in this Docket would be 67% (significantly higher than what I had stated in my direct testimony).

Second, she was correct in pointing out that I indicated that Providence proposed an A-T-B increase for retail customers in this Docket when they did not. What I meant to say was that Providence proposed what appeared to be an approximate A-T-B increase (about 22% - see Schedule HJS-20) for all retail customers (residential, commercial and industrial) that was significantly lower than the increase proposed for all wholesale customers. Admittedly, because of the variances in service charges, fire protection charges and higher wholesale increases, PW did not propose a straight A-T-B increase to all charges.

III. COST OF SERVICE STUDY EVALUATION

Q. The majority of your direct testimony focused on Providence's proposed Cost of Service Study. Can you explain the purpose of a COSS and why it is so important in setting fair rates?

A. A Cost Of Service Study (COSS) is critically important because its central purpose is to determine how much it costs the utility to provide service to each customer class. This translates directly into the level of revenues the utility should recover from each class. For example, if a COSS determines that 40% of the utility's total costs are caused by the residential class, then the residential class should pay the amount of revenues that matches 40% of the total costs. However, if the utility designs its rates such that the residential class only produces enough revenue to pay for 30% of the utility's

total cost, then one or more of the other classes will have to subsidize the residential class and pay more than their fair share. The subsidy resulting from this scenario is inherently unfair and inequitable. This is why it is so important that a COSS assign total system costs to each customer class in proportion to the level each class causes the utility to provide service. I refer to this principle of ratemaking as the "cost causation principle."

The primary goal in developing a COSS should be to ensure that each customer class pays its fair share of total system costs. The intent should not be to get the lowest rates possible for one or more classes, at the expense of one or more other classes. As set forth in my direct and surrebuttal testimony, it is my opinion that Providence violated the “cost causation principle” in it COSS. Providence is attempting to shift costs to wholesale customers that they do not cause. By shifting these costs, Providence is asking that wholesale customers subsidize costs caused by retail customers.

Corrected Net Plant Values

Q. In your direct testimony, you stated that Providence should make corrections to its Net Plant Values. Did Providence make these corrections?

A. Yes. They did make very significant corrections and adjustments.

Q. Do you agree with the corrections Providence made?

A. It is not possible for me to say absolutely that Providence made all corrections needed to be sure that its Net Plant Values are what they should be. They certainly appear to be more reasonable than those initially filed. The asset values in the initial filing and the corrected values submitted several weeks after the filing date were dramatically different. To assure the Commission and ratepayers that the values are correct, Providence should

have an independent consultant verify the accuracy of each plant account or specify how one or more should be adjusted based on detailed supporting analysis. I recognize that this probably cannot be accomplished at this time in this Docket, but it should be accomplished before the next case is filed.

Classification of Transmission and Distribution Pipes

Q. After reading Providence's testimony regarding its classification of transmission and distribution pipes, have you changed your position in your direct testimony?

A. No, I have not changed my position. Providence did not provide any rebuttal testimony to support its position, or which would cause me to change my position.

In his rebuttal testimony, Mr. Gadoury seems to argue that there is no difference at all between transmission and distribution pipes. He states:

> "All mains, with the exception of a small number of dead-ended branches or isolated pockets, are part of an intertwined network of interconnected water pipe loops which all synergistically function together to constitute a complete water delivery system to all categories of customers." (P. Gadoury Rebuttal, p. 3, lines 21-26)

> "The attempt by the wholesale interveners to categorize certain main sizes as exclusively benefitting retail customers (or wholesale customers) represents an overly simplified and unrealistic view of how a networked system of water pipes actually functions." (P. Gadoury Rebuttal, p. 3, lines 8-15)

This testimony completely ignores the fact that a distinction *has* to be made between distribution and transmission pipes for rate setting purposes. Providence's own witness, Mr. Smith acknowledges this fact.

> "Transmission pipes are water mains which are used to convey water throughout different areas of the Providence Water system, at which point smaller distribution mains are used to convey water within these areas to the service lines, which provide water to each individual

> Providence Water customer. Transmission mains also convey water to Providence Water's wholesale customers, which have their own local distribution system that is used to provide water to their retail customers.
>
> In theory, transmission mains are understood to be 'used and useful' by both wholesale and retail customers, whereas distribution mains are only used by retail customers. In terms of main replacement, wholesale and retail customers should share in the cost of replacing transmission mains, whereas retail customers should solely be responsible for the distribution mains which serve them. Given that the water system is interconnected however, it can be difficult to determine exactly which customers are served by which mains." (H. Smith Rebuttal, p. 16, lines 15-27).

However, Providence *has* made the distinction between transmission and distribution mains in its filings with the Rhode Island Department of Health. As stated in my direct testimony, Providence's Infrastructure Replacement Reports classify 12 inch pipe as distribution pipe, not transmission pipe.

In his rebuttal testimony, Mr. Gadoury claims this distinction was for "convenience purposes" only. He also claims that labeling 12 inch pipe as distribution pipe is not determinative of their function. Thus, being mindful of Mr. Gadoury's testimony that a pipe's function is more determinative of its classification, the Commission should closely examine the function of Providence's 12 inch pipes, its pipes greater than 12 inches, and to what extent each category of pipes benefit wholesale customers.

Q. Please describe how different sized pipes function in serving wholesale customers.

A. As set forth in my direct testimony, the four largest wholesale customers of Providence Water (East Providence, Kent County, Warwick and Bristol County) are responsible for 81.4% of all wholesale water purchases (based on four year averages contained in Schedule HJS-23). Each of these customers is served directly from the transmission system via water mains

30 inches or larger (see Providence's response to BCWA 1-14 and Pamela Marchand's surrebuttal testimony). In order to maintain water pressure through the system, smaller mains (i.e. 12 inches and smaller) are not normally used to supply larger mains. Thus, wholesale customers receive no benefit from those smaller mains.

Furthermore, all of Providence Water's wholesale customers are connected in at least one location to a transmission main 16 inches or larger. (See Providence Response to KCWA 5-1) And, all but three of Providence Water's wholesale customers – East Smithfield, Johnston and Kent County – are feed *only* from transmission mains that range in size from 20 inches to102 inches. . East Smithfield, in addition to being feed from one16 inch main, is also connected to two smaller mains - one 8 inch and one 12 inch. Johnston, in addition to being feed from three 24 inch main and one 20 inch main is also connected to two smaller 12 inch mains. Kent County, in addition to being feed from one 78 inch main, is also connected to one 12 inch main. (See Providence's response to KCWA 5-1)

To further calculate the relative benefits of piping used to supply wholesale customers, I computed the total water supplied to wholesale customers directly from mains 16 inches and larger versus the amount supplied directly from water mains 12 inches or smaller. (See Providence Response to KCWA 5-1)

Attached to my testimony is Exhibit DFR-SR-1, which lists the five interconnections between Providence and wholesale customers fed from Providence water mains 12 inches (four locations) or smaller (one is an 8 inch main). (See Providence Response to KCWA 5-1) In FY 2012, metered consumption form these five interconnections totaled 549,772 HCF. (See Providence Response to BCWA 1-11) Two of the five locations (the Capital Street and Nardolillo Street interconnections, both serving the Town of

Johnston) only contributed 6,783 HCF to the total (only about 1% of the total). Thus, the benefit provided by two of the five interconnections on the list provided almost no benefit to wholesale customers. In total, the five listed locations only provided 4.16% (549,772 HCF/13,213,689 HCF) of the total water supplied to wholesale customers for that fiscal year. Thus, the other 95.84% was directly supplied off the transmission system by water mains that ranged in size from 16 inches all the way up to 102 inches in diameter.

In my view this percentage is so small that it should be ignored for cost of service purposes, and all mains 12 inches and smaller should be classified as distribution mains that provide no benefit to transmission facilities or wholesale customers. However, if the Commission desires to assign a percentage of costs associated with 12 inch pipes to the wholesale customers, this percentage should not be greater than 4.16%, or rounded up to 5%.

Adding 12 inch mains to the distribution category changes the allocation of T&D plant from 48.71% to the transmission main category to 37.68%; and from 51.29% to the distribution category to 62.32%. This shift results in significant changes within Providence's rate model in both the K1 and K2 allocators, which in turn result in a significant shift in costs of service from the wholesale customer class to the retail class. While holding all other inputs unchanged and just making the one shift in T&D plant just described to Providence's rate model reduces the total wholesale allocation by $306,672.

Allocation of UAW to Retail and Wholesale Customers

Q. Do you agree with the changes Providence made to its UAW Calculation?

A. As I indicated in my direct testimony, I believed Providence's calculations were flawed for two reasons. First, Providence based its UAW calculations

on pipe length and diameter, rather than pipe length alone. By making this change and adding 225 miles of service pipe to the distribution category (as also agreed to by Providence in rebuttal testimony), the wholesale share of UAW is reduced from 24.3% to 8.6%. (see HJS Exhibit 14 Update in the rate model submitted with Providence's rebuttal testimony - a copy of which is attached as Exhibit DFR SR-2)

Second, Providence categorized 12 inch pipe as transmission pipe in its UAW calculation, and has not agreed to correct this second flaw. As set forth hereinabove, and in my direct testimony, 12 inch pipes provide very little benefit to wholesale customers. Therefore, for cost of services purposes and in apportioning UAW between retail and wholesale customers they should be treated as distribution mains and not lumped with transmission mains.

Additionally, after reviewing all rebuttal testimony and considering all of the arguments relative to the issue of what length of service pipe to include as distribution pipe in the allocation of losses between retail and wholesale customers, I agree with Mr. Woodcock and have included an additional 125 miles of service pipe beyond the length that Providence agreed to (350 miles instead of 225 miles of service pipe)

Attached to my testimony is Exhibit DFR SR-3. This Exhibit is a copy of HJS Exhibit 14 Update, except that I have added two corrections outlined above that Mr. Smith did not include. First, I added the length of 12 inch mains to the distribution category and deducted it from the transmission category. Second, I increased the length of service pipe to 350 miles, which increases both the total length of all pipe and the total length of distribution pipe by 125 mile. As can be seen on my Exhibit these two changes result in the wholesale share of UAW being reduced to 4.31% (from 8.60%). While holding all other inputs unchanged and just making the two changes to

Providence's rate model reduces the total wholesale allocation by $289,392.

Allocation Factors

Q. In your direct testimony you suggested that Providence revise a number of allocation factors. Did Providence make these changes?

A. Yes, Providence made the adjustments to the allocation factors identified in my direct testimony, with two exceptions:

- Allocation Factors K1 and K2 - Mr Smith indicated that land values would be removed from the calculation of these factors with his rebuttal testimony. (See Providence Response to KCWA 1-19) He failed to do this. Because of the long standing practice of not including land; the fact that very few land purchases are expected in the future (and if any are purchased in the future, they will likely be paid for from State Water Protection Charge Funds); and the fact that he reneged on a commitment very late in the process that the interveners relied on, Providence should be required to revise the rate model and exclude land from the calculation of these two Allocation Factors.

- Allocation Factors HM, HMC, and HOC - Mr Smith indicated that these factors would be updated and averaged over the 3 years covering the period FY2010 through FY2012, and that his rebuttal testimony would reflect this revision. (See Providence response to KCWA 1-13). Mr. Smith did not do this. While he updated allocators, he added 3 more years to make it a six year average. Mr. Smith did this because using the three year average he agreed to would result in a 65% increase in public fire protection. So once again,

Providence is asking that other customer classes subsidize costs they don't cause. Furthermore, because he reneged on a commitment that the interveners relied on very late in the process, Mr Smith should be required to revise the rate model and use only the most recent 3 years to derive the allocation percentages for each of these three Allocation Factors.

Direct Allocation of Dedicated Facilities

Q. Did Providence agree with your suggestion that it should change cost allocations for dedicated facilities?

A. No, they did not.

Q. Have you changed your position on this issue?

A. No, I have not changed my belief that where appropriate, and where data is economically available, direct allocations to cost components or customer classes should be made. However, upon further review and consideration of the particular circumstances involved with the direct allocation I proposed in my direct testimony, I will withdraw it as part of this case. My primary reasons for doing so are twofold. First, given PW's current accounting and reporting protocols, separating the O&M costs related to the six pump stations that were considered would not be economically feasible at this time. Second, because most of these facilities, are either very old or were donated by others; and because Providence does not include depreciation as a rate revenue requirement, the level of capital costs involved is very small.

However, my initial recommendation in this regard is not a departure from accepted industry practice as stated by Ms. Bonderevskis and Mr. Smith in their rebuttal testimonies. Direct allocations to one cost category or one customer class are standard practice in the industry. In fact, where a particular cost is known to be 100% related to one cost category or one

customer class, the use of allocation factors that would divide such a cost to two or more cost categories or customer classes would be a deviation from the cost causation principle described above. Furthermore, it would result in incorrectly assigning cost to a category or customer class that has no relationship to, or associated causal responsibility for, the cost being allocated.

In fact, Mr. Smith made direct allocations in his COSS. Two examples of direct allocations Mr. Smith used are the direct assignment of hydrant costs to the fire protection category and the direct assignment of capital costs associated with smaller size mains (currently 8 inch and smaller mains) to only retail customers in his allocation of plant assets. In this case, Providence clearly indicated that six booster pump stations and four related emergency generators were used solely by and only benefitted retail customers.

In future COSSs, I recommend that for any facilities that only serve and benefit one class of customers and for which the costs associated with those facilities can be easily identified and separated, those costs should be directly assigned to the customers that caused PW to incur those costs. Because of the nature of integrated water systems and in many cases established accounting and/or reporting practices I recognize that such opportunities are somewhat rare, but where they are known reasonable efforts should be made to make direct assignment of costs.

Infrastructure Repair and Replacement Program (IFR)

Q. Did Providence agree to your proposed changes regarding the assignment of costs related to its IFR program?

A. No, they did not.

Q. Do you agree with Providence's rebuttal testimony on this issue?

A. No. For the reasons explained in my direct testimony I believe that the very large and multi-decade investment in distribution mains (including 12 inch pipes as specified above) over the next twenty years fully warrants a deviation from the current method of allocating Providence's IFR costs. In my direct testimony I outlined an approach to accomplish such a modification. However, I did not recommend a specific modification to the current method. I will do so here.

As outlined in my direct testimony I recommend dividing the Infrastructure Replacement Capital into two components. One would include all or some portion dedicated to distribution mains, which would be allocated to all cost components except wholesale. The other would include the remaining portion of the IFR program costs which would be allocated to all cost categories including wholesale as currently proposed by Providence for all of the IFR program costs.

For the first component, I recommend including a relatively small portion of the costs related to distribution mains ($15.4 million). For the rate year I would only include 10% of the costs related to distribution mains ($15.4 million), which amounts to $1.54 million, leaving $13.86 million that would also be allocated using the current method. The $1.54 million would only be allocated to retail customers. The net effect in the rate year would be a reduction of $415,800 in IFR costs allocated to wholesale customers and a corresponding increase in the costs to retail customers. The following Tables show how the allocation of costs would change in the rate year between the current methodology and my recommended approach.

Table 1a. Allocation of IFR Costs to Retail and Wholesale Customers using Providence's method.

IFR Costs	Amount	Current Method - Cost to Retail	Current Method - Cost to Wholesale
90% of Distribution Main Costs	$13.860 Million	$10,117,800	$3,742,200
10% of Distribution Main Costs	$1.540 Million	$1,124,200	$415,800
All Other IFR Costs	$8.600 Million	$6,278,000	$2,322,000
Total IFR Costs	$24.000 Million	$17,520,000	$6,480,000

Table 1b. Allocation of IFR Costs to Retail and Wholesale Customers using the recommended method.

IFR Costs	Amount	Proposedt Method - Cost to Retail	Proposed Method - Cost to Wholesale
90% of Distribution Main Costs	$13.680 Million	$10,117,800	$3,742,200
10% of Distribution Main Costs	$1.540 Million	$1,540,000	$0
All Other IFR Costs	$8.600 Million	$6,278,000	$2,322,000
Total IFR Costs	$24,000 Million	$17,935,800	$6,064,200

Going forward for each of the 9 years following the rate year, an additional $1.54 million of water main costs would be excluded from any portion allocated to the wholesale customer class. Then beginning in the eleventh year $1.54 million would be added back to the amount of costs to be allocated between the retail cost categories and the wholesale customer class, and continue each year thereafter through the twentieth year. Thus, by the end of the twentieth year, which corresponds to the

duration of the 20 year IFR Plan, all of the IFR costs would again be allocated using the current methodology.

Unidirectional Flushing Program ("UDF")

Q. In its rebuttal testimony, Providence continues to maintain that costs related to Providence's unidirectional flushing program be assigned to wholesale customers. Do you agree with their testimony?

A. No, I do not.

Q. Have you changed your position that costs related to Providence's unidirectional flushing program should not be assigned to wholesale customers?

A. No. I have not. Again, the central issue here is whether or not 12 inch water mains provide any significant benefit to wholesale customers. As specified above, Providence has a transmission system consisting almost entirely of pipes ranging from 16 inches in diameter to over 100 inches in diameter. Only three wholesale customers are served by 12 inch (or smaller) connections and each of those customers are served at other interconnection locations from mains much larger than 12 inchs in size. Thus, the level of service and benefit provided to the wholesale class of customers by pipes 12 inches and smaller is extremely small in comparison to that provided by pipes 16 inches or larger. As I outlined above I have estimated that relative percentage of benefits to be approximately 4.16% for mains that are 12 inches in diameter or smaller versus 95.84% for all larger size transmission mains. Thus, once again, 4.16% is the maximum amount of UDF costs that should be assigned to wholesale customers. While only about $10,000 of these cost are being allocated to wholesale customers, that amount should be reduced to zero in Providence's rate model.

Conversion to Monthly Billing

Q. Did Providence's rebuttal testimony address your position that the costs associated with Providence's monthly billing conversion should not be assigned to wholesale customers?

A. No, and I continue to maintain that wholesale customers should not be responsible for these costs. Because the wholesale customers have historically been billed on a monthly basis, the costs associated with this program are incurred solely to convert Providence Water's retail distribution customers to monthly billing. Providence claims there are somewhat higher administrative costs associated with billing wholesale customers than billing a retail customer. However, even if this were true, those additional costs are unrelated to the costs of converting retail customers to monthly billing. Therefore, none of the costs of converting retail customers to monthly billing should be allocated to the wholesale customer class.

IV. REVENUE REQUIREMENTS

New Central Operations Facility

Q. Do you still have concerns about Providence's new Central Operations Facility (COF) and its proposal to include a cash capital revenue requirement to pay for related costs?

A. Yes, I remain very concerned about Providence's request for $2.45 million dollars of annual funding for the COF when Providence has provided almost no support for this request. Furthermore, the information Providence *did* provide – when requested by the other parties in this Docket – does not provide any clarity or support for Providence's request.

When Providence filed its direct testimony, *none* of it witnesses testified about the need or cost for a COF. Providence's General Manager, Boyce Spinelli, and Paul Gadoury, the retired Director of Engineering, never mentioned the need for a COF in their testimony. In fact, the only

documentation that evidenced Providence's request was Paul Gadoury's Exhibit PG-5, which claimed to lay out Providence's Capital Plan for FY13 through FY17. This Capital Plan included a "New PW Central Operations Facility". Providence listed the "Total" for this project as $12,000,000 with annual funding of $2,400,000 over five years. This was Providence's sole support for an enormously expensive public works project that ratepayers will have to fund. As the parties would learn through discovery, the actual annual funding request is $2,450,000 per year, and the COF could cost in excess of $50 million.

Due to the lack of information Providence provided, the BCWA and Kent County Water Authority ("KCWA") issued several data requests seeking information about the COF. Rather than clarifying issues regarding the cost, form of ownership and financing for the COF, Providence's responses only raised more questions.

Q. Has Providence clarified the total cost of the COF?

A. No they have not. The information provided by Providence regarding the *potential* cost of the COF is as follows:

- In response to KCWA 2-15, Providence provided portions of an executive summary from a 2009 CDM Report entitled "Providence Water Supply Board Facility Assessment-Phase II." This report set forth a number of recommendations and cost ranges from $9.4 million to $39.5 million.

- In response to KCWA 2-15, Providence also provided a November 15, 2010 memorandum from its Director of Finance, Jean Bondarevskis, seeking approval to borrow funds for a COF.

- According to Ms. Bondarevskis' memorandum the highest estimated cost for the COF "could be $39 million dollars."

- Providence's response to KCWA 2-15 also included a November 17, 2010 Providence Water Supply Board Resolution that authorized a $39 million borrowing for the COF.

- Yet, Providence has not explained why its Board chose the most expensive option of $39 million dollars for the COF.

- In fact, the BCWA asked this direct question of Providence in BCWA 4-5 a. Ms. Bondarevskis did not answer this question. Rather, she stated that Ms. Marchand, Providence's former Chief Engineer, "requested that the memo to the Board approve that amount." She did not answer why the Board authorized that amount or what analysis went into approving that amount.

- Despite the fact that Providence's Board approved a $39 million borrowing, Mr. Gadoury's Exhibit PG-5 only listed a "Total" of $12 million dollars for the COF.

- In response to BCWA 2-3, Providence indicated that Dimeo Construction opined that the "probable construction cost" for the COF is "$36 million (in 2013 dollars)."

- The BCWA later requested the DiMeo report and received multiple versions of the report.

- Dimeo provided several different estimates for several different types of buildings (See Exhibit DFR SR-4):

- 50,000 sq. ft., two story building with a total estimated price of **$14,531,227** ($290.625/sq. ft.), including security building, contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $1,000,000 furnishing allowance (dated 1/12/11).

- 80,000 sq. ft. two story office building with a total estimated price of **$21,655,624** ($270.695/sq. ft), including security building, contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $1,600,000 furnishing allowance (dated 1/12/11).

- 80,000 sq. ft. three story office building with a total estimated price of **$22,136,651** ($276.708/sq. ft.), including security building, contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $1,600,000 furnishing allowance (dated 1/12/11).

- 60,000,000 sq. ft. Maintenance building with a total estimated price of **$14,392,686** ($239.878/sq. ft.), including security building, contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $30,000 furnishing allowance (dated 1/12/11)

- Six Building Campus with a total estimated price of **$43,008,479** including contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $1,600,000 furnishing allowance (dated 5/15/13).

- New Campus - 7 Site Development - 440,500,000 sq. ft. with a with a total estimated price of **$35,918,095** including contingency, escalation, permits, insurance, C.M. Fee, P&P bond, Architects & Engineers fee and a $1,000,000 furnishing allowance (dated 7/31/13).

- The DiMeo estimates do not appear to be the total project cost. It appears these are only the construction costs for a building or buildings.

- In its response to BCWA 2-3, Providence acknowledged that the DiMeo cost estimates do "not include yearly operational costs, land purchase or lease costs and any site remediation costs that may be required."

- As such, when all the necessary costs for the COF are added together, they will exceed all of DiMeo's estimates.

- Furthermore, Providence provided two letters of intent dated September 3, 2013 in Response to BCWA 4-4 that seem to provide different cost scenarios for the COF.

- The first letter describes the lease of a 53,000 square foot administration facility. There are two alternative terms – 20 years or 30 year lease-to-own. The payments under the twenty year lease total $23,323,212. The payments under the 30 year least-to-own total $36,845,235. The terms upon which Providence would exercise its option to own are not clearly stated in the letter. The departments housed at this proposed facility would be Administration, Finance, MIS, Engineering, Support Services, Forestry and Watershed Security.

- A second Letter of Intent, also dated September 3, 2013, describes the construction of a 29,000 sq. ft. Admin building; an 8,400 sq. ft. Stock Building; a 7,000 sq. ft. Automotive Repair Facility; a 12,000 sq. ft. storage facility and a 46,000 sq. ft. two story garage. The "development cost" of these facilities is $21,271,000.

- It is unclear whether Providence plans to pursue one or both options outlined in these letters of intent. If they pursue both, the combined costs could reach $58,116,235.

Based on the documentation Providence provided, there is absolutely no way to discern the cost of the COF, or whether the cost of the COF is reasonable.

Q. Has Providence clarified whether they will own or lease the COF?

A. No, based on the information set forth above, there is no way to tell whether Providence will lease or own the facility.

Q. Has Providence clarified how they will finance the COF, or the terms of financing?

A. No. In her rebuttal testimony, Ms. Bondarevskis stated:

> "Providence Water intends to use long term financing, once all the details are worked out and Providence Water will then file with the Division of Public Utilities for financing approval. (Bondarevskis Rebuttal, p. 7, lines 15-18)."

This does not provide any details on the financing. In fact it causes more concern than it provides answers.

Q. Why?

A. There is no way to know how Providence intends to "work out" the details. While Ms. Bondarevskis indicates that Providence will file for financing approval with the Division, there is no indication that Providence will ever come back to the Commission and explain how it "worked out" the details of the COF. Under Providence's proposal neither the Commission, nor the ratepayers, will ever get to evaluate the cost, and the reasonableness of the cost, for the COF.

According to Providence, there is $6 million in the Capital Improvement Fund. (Providence Response to BCWA 4-9 b.) Ms. Bondarevskis claims that Providence will use this $6 million for "land purchase, site work and to defray the long terms cost" of the COF. (Bondarevskis Rebuttal, p.7, lines 18-20). She likens the use of these accumulated funds "to putting a good down payment on a home…" The problem is we don't know anything

about the “home” Providence wants to buy. Furthermore, we don’t even know if Providence is buying a home, they may just be renting. However, the biggest problem is that they want ratepayers to pay for a home when Providence can’t even tell them the cost, location or terms of the “mortgage.”

Q. Do you have any other concerns or recommendations?

A. Yes. In addition to the foregoing, if this facility is eventually approved and built, I believe that the vast majority of the cost of this facility, because of its long life expectancy (40 to 50 years or more), should be paid for over time with bonded debt. It is only through such a funding mechanism that a majority of the capital costs of such a facility can be spread over an extended period of time and thus be paid for by those that will benefit most from its use for many years into the future. Providence has accumulated $6 million in cash in its Capital Fund. This is more than enough money for the “down payment” once Providence receives permission for the Commission to go forward with procuring a COF. Therefore, I recommend that the Capital Improvement Fund be restricted and that no additional funds be withdrawn for this potential project until a specific site and cost it is approved by this Commission and any other agencies from which approval is required.

<u>Rate Case Expenses And Amortization</u>

Q. In its rebuttal testimony, Providence disagreed with your proposal to amortize rate case expense over six years. Have you changed your position?

A. Yes, to a degree. I still believe that rate case expenses should be amortized over a period of time based on the historic average of the intervals between full rate cases going back at least 3 or 4 full rate cases (not including abbreviated rate cases). As clearly presented in my direct testimony I recommend 6 years for the amortization period. Providence believes it will

come before the Commission for another full rate case in two years (which in itself is troubling), and therefore the amortization period should be 2 years. If PW prognosticated that it would be back for another full rate increase in 1 year, is that a reasonable justification for shortening the amortization period to 1 year? What happens if the Commission did allow a 2 year amortization and for whatever reason Providence didn't request another rate increase for 3 or 4 years? Would Providence recover two times the allowed amount, if it did take four years before its next rate increase request? The Commission should not base its decision in this matter based on Providence's belief at this time. Plans are subject to change without notice. Even if their belief turns out to be true, that short interval (2 years) should only be useful in shortening the average interval between full rate cases as part of determining the amortization period for rate case expenses in the next rate case.

Notwithstanding the foregoing, upon further review and consideration of the rebuttal testimonies and some responses to information requests received after my direct testimony I believe a fair compromise between the parties would be a four year amortization.period. If approved, this would reduce the proposed recovery of this expense by 50% from $116,811 to $58,406 in the rate year.

V. RATE DESIGN

Conservation rates

Q. Have you changed your position on conservation rates for wholesale customers at this time?

A. No. I have not, and I note that Providence agrees on this issue.

Q. Have you prepared a revised COSS?

A. Other than the exhibits attached to my testimony, I have not prepared a completely revised cost of service study.

Q. Why not?

A. Currently, three rate models have been produced – Providence's, the Division's and Kent County's. Further, it is my understanding that Providence and the Division may have reached a settlement. I do not know for sure, because the Bristol County Water Authority was not invited to participate in these discussions. If a settlement is presented, then this will likely produce another version of the rate model and COSS that the Commission will have to consider. Since the BCWA and the KCWA are proposing very similar adjustments, I believe it would simplify the proceedings at hearing if the BCWA did not add another rate model and COSS to the mix as it would include many of the same adjustments proposed by the KCWA. However, I am happy to submit any schedules the Commission requests that may show any variances between the BCWA and KCWA surrebuttal positions.

VI. CONCLUSION

Q. Mr. Russell, does that conclude your testimony at this time?

A. Yes, it does.

Exhibit DFR SR-1

The following provides an estimate of the relative benefit that smaller size water mains provide to Wholesale Customers:

1. Total water consumption in FY 2012 taken by the Town of East Smithfield through their Dean Avenue connection (8" service line to a 8" main) with PW.	72,337 HCF
2. Total water consumption in FY 2012 taken by the Town of East Smithfield through their Waterman Avenue connection (12" service line to a 12" main) with PW.	198,843 HCF
3. Total water consumption in FY 2012 taken by the Town of Johnston through their Capitol Street connection (8" service line to a 12" main) with PW.	2,630 HCF
4. Total water consumption in FY 2012 taken by the Town of Johnston through their Nardolillo Street connection (8" service line to a 12" main) with PW.	4,153 HCF
5. Total water consumption in FY 2012 taken by the KCWA through their Oaklawn Avenue connection (12" service line to a 12" main) with PW.	271,809 HCF
6. Total All 5 Interconnections (Sum lines 1 through 5)	549,772 HCF
7. Total Wholesale Consumption FY12	13,213,689 HCF
8. Percent of total Supply from Smaller Pipe Sizes (line 6 / line7)	4.16%

Exhibit DFR SR-2

HJS Exhibit 14 Update

Inch-Mile Calculations
Year Ending June 20, 2006

Pipe Size (inches)	Length (miles)	Inch-Miles
6	482.44	2,894.64
8	290.25	2,322.00
10	3.06	30.60
12	93.99	1,127.88
16	40.97	655.52
20	5.89	117.80
24	24.09	578.16
30	16.09	482.70
36	1.93	69.48
42	4.88	204.96
48	2.42	116.16
60	4.19	251.40
66	1.60	105.60
78	4.39	342.42
90	4.47	402.30
102	5.18	528.36
Services	225.00	
Totals	1,210.84	10,229.98

			Length %	Inch-Miles %
Local Distribution (10" or less)	1,000.75	5,247.24	82.65%	51.29%
Transmission (12" and greater)	210.09	4,982.74	17.35%	48.71%

Unaccounted for Water Responsibility

Retail Customers	
Local Distribution	82.65%
Transmission	8.75%
Total Retail Share of Unaccounted for Water	91.40%
Wholesale Customers	
Local Distribution	0.00%
Transmission	8.60%
Total Wholesale Share of Unaccounted for Water	8.60%

Exhibit DFR SR-3

HJS Exhibit 14 Update (Modified)

Inch-Mile Calculations
Year Ending June 20, 2006

Pipe Size (inches)	Length (miles)	Inch-Miles
6	482.44	2,894.64
8	290.25	2,322.00
10	3.06	30.60
12	93.99	1,127.88
16	40.97	655.52
20	5.89	117.80
24	24.09	578.16
30	16.09	482.70
36	1.93	69.48
42	4.88	204.96
48	2.42	116.16
60	4.19	251.40
66	1.60	105.60
78	4.39	342.42
90	4.47	402.30
102	5.18	528.36
Services	350.00	
Totals	1,335.84	10,229.98

			Length %	Inch-Miles %
Local Distribution (12" or less)	1,219.74	5,247.24	91.31%	51.29%
Transmission (16" and greater)	116.10	4,982.74	8.69%	48.71%

Unaccounted for Water Responsibility

Retail Customers	
Local Distribution	91.31%
Transmission	4.38%
Total Retail Share of Unaccounted for Water	95.69%
Wholesale Customers	
Local Distribution	0.00%
Transmission	4.31%
Total Wholesale Share of Unaccounted for Water	4.31%

DIMEO

Providence Water Supply Board
50,000 sqft Office Building
Budget

1/12/2011

Estimator	*tfxs*
Job size	50000 SF
Job cost job number	227-10
Notes	Office building is budgeted as a 50,000 sqft two story building. 25,000 sqft per floor Concrete foundations, slab on grade steel framed construction. An FF&E (Furnishings Allowance) of $20 per SF ($1,000,000) in included

DIMEO

Providence Water Supply Board
50,000 sqft Office Building
Budget

1/12/2011

Location	Group	Phase	Description	Takeoff Quantity	Sub Name	Total Cost/Unit	Total Amount
			Electrical Complete				1,350,000
		16200.010	Power Generation				
			Generators	1.00 ea		75,000.00 /ea	75,000
			Power Generation				75,000
			ELECTRICAL				1,425,000
			HEADQUARTERS				**10,889,678**

DIMEO

Providence Water Supply Board
50,000 sqft Office Building
Budget

1/12/2011

Partial Totals

Labor				
Material				
Subcontract				
Equipment				
Other				
	10,889,678	**10,889,678**		
FF&E $20/SF Allowance	1,000,000			
Security - Booth Building				
	1,000,000	**11,889,678**		
Contingency	594,484		5.000 %	
	594,484	**12,484,162**		
Escalation	436,946		3.500 %	
	436,946	**12,921,108**		
Building Permit	193,817		1.500 %	
	193,817	**13,114,925**		
G & L Insurance	111,477		8.500 $ /	#######
	111,477	**13,226,402**		

DIMEO

Providence Water Supply Board
50,000 sqft Office Building
Budget

1/12/2011

Partial Totals

C.M. Fee (2.85%)	376,952		2.850 %
	376,952	**13,603,354**	
P&P Bond	105,351		0.725 %
	105,351	**13,708,705**	
Architects & Engineers Fees	822,522		6.000 %
	Partial Total	***14,531,227***	***290.625 /SF***

DIMEO

Providence Water Supply Board
80,000 sqft Two Story Office Building
Budget

1/12/2011

Estimator	*tfxs*
Job size	80000 sqft
Job cost job number	227-10
Notes	Office building is budgeted as an 80,000 sqft two story building. 40,000 sqft per floor. Concrete foundations, slab on grade steel framed construction. An FF&E (Furnishings Allowance) of $20 per SF ($1,600,000) is included.

DIMEO

Providence Water Supply Board
80,000 sqft Two Story Office Building
Budget

1/12/2011

Location	Group	Phase	Description	Takeoff Quantity	Sub Name	Total Cost/Unit	Total Amount
			Controls				400,000
			MECHANICAL				3,252,000
	16000.000		ELECTRICAL				
		16000.010	Electrical Complete				
			Electrical (Sqft)	80,000.00 sf		27.00 /sf	2,160,000
			Electrical Complete				2,160,000
		16200.010	Power Generation				
			Generators	1.00 ea		93,750.00 /ea	93,750
			Power Generation				93,750
			ELECTRICAL				2,253,750
			HEADQUARTERS				**16,118,972**

DIMEO

Providence Water Supply Board
80,000 sqft Two Story Office Building
Budget

1/12/2011

Estimate Totals

Labor				
Material				
Subcontract				
Equipment				
Other				
	16,118,972	**16,118,972**		
FF&E $20/SF Allowance	1,600,000			
Security - Booth Building				
	1,600,000	**17,718,972**		
Contingency	885,949		5.000 %	
	885,949	**18,604,921**		
Escalation	651,172		3.500 %	
	651,172	**19,256,093**		
Building Permit	288,841		1.500 %	
	288,841	**19,544,934**		
G & L Insurance	166,132		8.500 $ /	#######
	166,132	**19,711,066**		

DIMEO

Providence Water Supply Board
80,000 sqft Two Story Office Building
Budget

1/12/2011

Estimate Totals

C.M. Fee (2.85%)	561,765		2.850 %
	561,765	**20,272,831**	
P&P Bond	157,003		0.725 %
	157,003	**20,429,834**	
Architects & Engineers Fees	1,225,790		6.000 %
	Total	***21,655,624***	***270.695 /sqf***

DIMEO

Providence Water Supply Board
80,000 sqft Three Story Office Building
Budget

1/12/2011

Estimator	*tfxs*
Job size	80000 sqft
Job cost job number	227-10
Notes	Office building is budgeted as an 80,000 sqft three story building. 26,667 sqft per floor. Concrete foundations, slab on grade steel framed construction. An FF&E (Furnishings Allowance) of $20 per SF ($1,600,000) is included.

DIMEO

Providence Water Supply Board
80,000 sqft Three Story Office Building
Budget

1/12/2011

Location	Group	Phase	Description	Takeoff Quantity	Sub Name	Total Cost/Unit	Total Amount
			Controls				400,000
			MECHANICAL				3,252,000
	16000.000		ELECTRICAL				
		16000.010	Electrical Complete				
			Electrical (Sqft)	80,000.00 sf		27.00 /sf	2,160,000
			Electrical Complete				2,160,000
		16200.010	Power Generation				
			Generators	1.00 ea		93,750.00 /ea	93,750
			Power Generation				93,750
			ELECTRICAL				2,253,750
			HEADQUARTERS				**16,512,555**

DIMEO

Providence Water Supply Board
80,000 sqft Three Story Office Building
Budget

1/12/2011

Estimate Totals

Labor				
Material				
Subcontract				
Equipment				
Other				
	16,512,555	**16,512,555**		
FF&E $20/SF Allowance	1,600,000			
Security - Booth Building				
	1,600,000	**18,112,555**		
Contingency	905,628		5.000 %	
	905,628	**19,018,183**		
Escalation	665,636		3.500 %	
	665,636	**19,683,819**		
Building Permit	295,257		1.500 %	
	295,257	**19,979,076**		
G & L Insurance	169,822		8.500 $ /	#######
	169,822	**20,148,898**		

DIMEO

Providence Water Supply Board
80,000 sqft Three Story Office Building
Budget

1/12/2011

Estimate Totals

C.M. Fee (2.85%)	574,244		2.850 %
	574,244	**20,723,142**	
P&P Bond	160,491		0.725 %
	160,491	**20,883,633**	
Architects & Engineers Fees	1,253,018		6.000 %
	Total	***22,136,651***	***276.708 /sqf***

DIMEO

Providence Water Supply Board
60,000 sqft Maintenance Building
Budget

1/12/2011

Estimator	*tfxs*
Job size	60000 SF
Job cost job number	227-10
Notes	Maintenance building is budgeted as a 60,000 sqft one story building. Concrete foundations, slab on grade steel framed construction, concrete block and brick exterior veneer. An FF&E (Furnishings Allowance) of $30,000 in included

DIMEO

Providence Water Supply Board
60,000 sqft Maintenance Building
Budget

1/12/2011

Location	Group	Phase	Description	Takeoff Quantity	Sub Name	Total Cost/Unit	Total Amount
			Power Generation				75,000
			ELECTRICAL				1,155,000
			VEHICLE MAINT.				11,746,321

DIMEO

Providence Water Supply Board
60,000 sqft Maintenance Building
Budget

1/12/2011

Partial Totals

Labor				
Material				
Subcontract				
Equipment				
Other				
	11,746,321	**11,746,321**		
FF&E Allowance	30,000			
Security - Booth Building				
	30,000	**11,776,321**		
Contingency	588,816		5.000 %	
	588,816	**12,365,137**		
Escalation	432,780		3.500 %	
	432,780	**12,797,917**		
Building Permit	191,969		1.500 %	
	191,969	**12,989,886**		
G & L Insurance	110,414		8.500 $ /	#######
	110,414	**13,100,300**		

DIMEO

Providence Water Supply Board
60,000 sqft Maintenance Building
Budget

1/12/2011

Partial Totals

C.M. Fee (2.85%)	373,359		2.850 %
	373,359	**13,473,659**	
P&P Bond	104,347		0.725 %
	104,347	**13,578,006**	
Architects & Engineers Fees	814,680		6.000 %
	Partial Total	***14,392,686***	***239.878 /SF***

Estimate Totals

Description	Amount	Totals	Rate
		32,153,719	
FF&E $20/SF Allowance	1,600,000		
	1,600,000	33,753,719	
Estimating Contingency	3,375,372		10.00 %
	3,375,372	37,129,091	
Escalation per Year	1,113,873		3.00 %
	1,113,873	38,242,964	
Building Permit	573,644		1.50 %
	573,644	38,816,608	
G & L Insurance	329,941		8.50 $ / 1,000
	329,941	39,146,549	
C.M. Fee (2.85%)	1,115,677		2.85 %
	1,115,677	40,262,226	
P&P Bond	311,811		0.73 %
	311,811	40,574,037	
Architects & Engineers Fees	2,434,442		6.00 %
Total		***43,008,479***	

DIMEO

Providence Water Supply Board
New Campus Budget
Summary Totals

7/31/2013

Bid Item	Phase	Description	Takeoff Quantity		Total Cost/Unit	Total Amount
	2820.010	Improvmnts: Fencing				112,875
	2840.050	Improvmnts: Bollard/Rails				19,200
	2840.060	Improvmnts: Parking Items				100,000
	2900.010	Landscape: General				60,000
		7 Site Development	**440,500 sf**	**440,500.00 sf**	**6.30 /sf**	**2,772,979**

Estimate Totals

Description	Amount	Totals	Rate	
		28,709,975		
FF&E Allowance	1,000,000			
	1,000,000	29,709,975		
Estimating Contingency	2,228,248		7.50 %	
	2,228,248	31,938,223		
Building Permit	479,073		1.50 %	
	479,073	32,417,296		
G & L Insurance	275,547		8.50 $ /	1,000
	275,547	32,692,843		
C.M. Fee (2.85%)	931,746		2.85 %	
	931,746	33,624,589		
P&P Bond	260,406		0.73 %	
	260,406	33,884,995		
Architects & Engineers Fees	2,033,100		6.00 %	
Total		***35,918,095***		

CERTIFICATION

I hereby certify that on October 25, 2013, I sent a copy of the within to all parties set forth on the attached Service List by electronic mail and copies to Luly Massaro, Commission Clerk, Robert A. Watson, Esquire and Peter D. Ruggiero by electronic mail and regular mail.

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